

TRANSNASAL TOPICAL SPHENOPALATINE GANGLION BLOCK TO TREAT CHRONIC DRUG-RESISTANT MIGRAINE: A CASE REPORT

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BACKGROUND

The history of sphenopaltine ganglion nerve block dates to 1908 when Greenfield Sluder, M.D., first described the treatment of a variety of headache and facial pain syndromes by blocking this sympathetic ganglion with cocaine. SPG blocks are a proposed treatment option for chronic migraines and some severe non migraines and some severe non-migraine headaches. The SPG is a group of nerve cells located behind the bony structures of the nose. The nerve bundle is linked to the trigeminal nerve, the primary nerve involved in headache disorders. The rationale for using SPG blocks to treat headaches is that local anesthetics in low concentrations could block the sensory fibers and thereby reduce pain while maintaining autonomic function.

We report a successful case of the Tx360[®] Nasal Applicator (Tian Medical) employment in a patient with several chronic migraine

CLINICAL PRESENTATION

A caucasian 38-year-old woman with a long history of chronic migraine with trigeminal pattern, BMI 27, no smoking history, without comorbidity, was referred to our pain clinic because of intractable pain. For analgesia amitriptyline, clonazepam, ergotamine, non-steroidal anti-inflammatory drugs had been tried but had produced minimal benefit. On physical examination, she had no sensory or motor deficit, and her cranial nerves were intact. She had considerable pain on light touch of the skin overlying the nose, the maxillae, and the forehead. We initiated a trial of SPGB by instillation using Tx360[®] Nasal Applicator (Tian Medical). With patient in seated position, we inserted the catheter intranasally and, once in place, we instilled 7,5% levobupivacaine, 3 ml into each nostril. After 20 minutes she reported a diminution of her pain by at least 50% as indicated on a visual analog scale from 0 to 10. We repeated the treatment twice a week for 3 weeks (total 6 treatments). On subsequent follow-up visits over a period of 3 months, she reported a consistently reduction of her pain by 50% to 60%. Local skin tenderness over her nose decreased considerably and over her maxillae and eyes to some extent. The patient did not experience any disorientation or other symptoms suggesting systemic local anesthetic toxicity.

CONCLUSION

This clinical observation suggests that repetitive SPG blocks using levobupivacaine may be an effective treatment for chronic, resistant migraine. The Tx360[®] Nasal Applicator is the only device with which patient remain seated position, reducing discomfort during instillation

REFERENCES

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